UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY 0 8 2014

REPLY TO THE ATTENTION OF:

E-19J

Bethaney Bacher-Gresock
Federal Highway Administration – Wisconsin Division
525 Junction Road, Suite 8000
Madison, Wisconsin 53717-2157

Re: **I-43 North-South Freeway Corridor Study, Silver Spring Drive to WIS 60, Milwaukee and Ozaukee Counties, Wisconsin, Draft Environmental Impact Statement, CEQ #20140095**

Dear Ms. Bacher-Gresock:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement submitted the Federal Highway Administration (FHWA) and the Wisconsin Department of Transportation (WisDOT). Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The study area extends approximately 14 miles along I-43, from Silver Spring Drive in the City of Glendale in Milwaukee County to WIS 60 in the Village of Grafton in Ozaukee County, Wisconsin. The proposed project includes changes to the mainline and several interchanges. Therefore, the lead agencies have identified the following as the preferred alternative:

- **I-43 Mainline South Segment (Silver Spring Drive to Green Tree Road):** Modernization – 6 Lanes; Mainline shifted east with additional lanes added; includes reconstructing the Jean Nicolet Road and widening Port Washington Road from two to four lanes;
- **I-43 Mainline North Segment (Green Tree Road to WIS 60):** Modernization – 6 lanes; additional lanes added inside the median;
- **Good Hope Road interchange:** Tight Diamond;
- **Brown Deer Road interchange:** Diverging Diamond (Tight Diamond also carried forward for analysis);
- **County Line Road interchange:** Split Diamond Hybrid (No Access and Partial Diamond also carried forward for analysis);

- **Mequon Road interchange:** Tight Diamond;
- **Highland Road interchange:** Tight Diamond;
- **County Highway C interchange:** Diamond.

Per the Moving Ahead for Progress in the 21st Century Act (MAP 21), FHWA has elected to issue the Final EIS and Record of Decision (ROD) concurrently. Therefore, the Draft EIS has identified a preferred alternative. EPA provided concurrence on the preferred alternative in March 2014. EPA will still review and provide comments on the Final EIS/ROD.

Based on the information provided, EPA has rated the document **EC-1, Environmental Concerns - Adequate**. This rating is primarily based on potential impacts to aquatic resources within the corridor study area. EPA has the following recommendations to improve the quality of the document and reduce environmental impacts as a result of the proposed project. A summary of our ratings definitions is enclosed.

Concurrence on the Preferred Alternative – Highland Road Interchange

As discussed above, per MAP 21, FHWA has identified a preferred alternative for the corridor study. EPA reviewed the administrative Draft EIS in March 2014 and provided concurrence on the preferred alternative. Since then, WisDOT and FHWA have eliminated the no-access alternative at Highland Road and requested EPA's concurrence on this decision. Based on the information provided regarding indirect impacts to traffic patterns under the no-action alternative, EPA concurs with the elimination of the no-access alternative and the selection of the tight diamond as the preferred alternative.

Aquatic Resources

The discussion under *Water Quantity* on page 3-78 includes descriptions of "subwatersheds," without identifying to which hydrologic unit code (HUC) level these refer. Further, this section compares some of the subwatersheds quantitatively, but others qualitatively. For instance, the Ulao Creek watershed is described as being much "smaller" and "less" developed than other areas. EPA suggests that actual quantitative units are used, rather than generic descriptions, such as "small" and "less." Finally, this section should provide a conclusion about whether a 9.8% increase in impervious surface in the Ulao Creek watershed will have a significant adverse impact on water quality, considering it is "less" developed than other subwatersheds in the Milwaukee River watershed.

> **Recommendations:** The Final EIS/ROD should be updated to: clarify to which HUCs the term subwatershed refers; include quantitative descriptions of impacts to subwatersheds; and document whether the increase of 9.8% of impervious surfaces in the Ulao Creek watershed in the I-43 project area is significant.

EPA acknowledges the discussion throughout section 3.10 regarding the fish passage within the watershed. We understand that local community groups have been active in the development and maintenance of the fish passage management projects. The Draft EIS does not state whether the community groups will be coordinated with as the design stage continues.

> **Recommendation:** The Final EIS/ROD should clarify the extent to which the community has been involved in the development and maintenance of fish passage measures for stream crossings within the project corridor. Where the community has been actively involved, EPA recommends continued coordination with them to ensure valuable efforts will not be undone by the proposed project.

EPA appreciates that the culvert design criteria would allow for aquatic organisms passage; we remind WisDOT and FHWA to include these criteria at the Clean Water Act Section 404 permitting stage, where appropriate. The Draft EIS does not include specific measures to ensure appropriate design and accounting of current and future flow patterns through culverts or pipes. While we prefer bottomless culverts, we have identified some additional measures for box culverts or pipes that should be considered to reduce impacts to stream habitat impacted by stream crossings.

> **Recommendation:** EPA recommends the Final EIS/ROD include specific design measures to accommodate current and future flow patterns through culverts and pipes within the corridor study area. Culverts or pipes should:
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> - Be single span, where feasible;
> - Be appropriately sized to ensure that stable channel morphology can be maintained and baseflow is accommodated;
> - Be bottomless, where feasible, or at minimum, lowered into the substrate to allow accumulation of a natural stream bottom;
> - Span the width of the floodplain;
> - Be constructed during low-flow conditions, which may include a dam and pump-around to ensure construction is completed in dry conditions.

The discussion under *Stream Crossings* on page 3-81 states that all creeks and tributaries under I-43 are conveyed via pipes or box culverts. The section goes on to state, "culvert design would incorporate features to maintain low flow conditions." The Draft EIS does not clarify if this statement applies to pipes, as well as box culverts.

> **Recommendation:** The Final EIS/ROD should clarify whether design measures would incorporate low flow conditions for pipes as well as culverts.

The Draft EIS includes several tables and narrative discussion that would benefit from representation in a map, particularly tables 3-24 and 3-25 which describe crossings and impacts

from alternatives to the 100-Year Floodplain. If the EIS already includes these maps, the Final EIS/ROD should identify them.

> **Recommendation:** The Final EIS/ROD should at least identify where in the document maps related to tables 3-24 and 3-25 are located. If they are not included, EPA recommends adding maps that depict crossing and potential impacts from alternatives to the 100-Year Floodplain.

Finally, please note that EPA may make additional design-level comments on the preferred alternative during the Clean Water Act Section 404 permitting stage.

Community Involvement and Agency Coordination

Because the proposed diverging diamond interchange configuration at Brown Deer Road could be the first interchange of its type in the state of Wisconsin, EPA strongly encourages public outreach efforts to educate drivers. EPA acknowledges the summary of comments regarding the diverging diamond interchange on page 5-10, particularly since commenters were more supportive of this alternative once they saw a driving simulation of it. Other than this instance, the Draft EIS does not mention whether other outreach efforts were taken, if any, to ensure adequate public understanding of a new interchange configuration.

> **Recommendation:** The Final EIS/ROD should document whether a public education campaign was deployed to ensure adequate understanding of the new interchange configuration, including whether fact sheets, websites, signage, or other media were, are, or will be used to relay information and how members of the public responded to the new interchange type. If no public outreach campaign has been pursued, EPA strongly encourages WisDOT and FHWA to begin education efforts.

Air Quality

The National Institute for Occupational Safety and Health (NIOSH) has determined that diesel exhaust is a potential occupational carcinogen, based on a combination of chemical, genotoxicity, and carcinogenicity data. In addition, acute exposures to diesel exhaust have been linked to health problems such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues.

> **Recommendations:** Although every construction site is unique, common actions can reduce exposure to diesel exhaust. EPA recommends that FHWA and WisDOT commit to the following actions during construction in the Final EIS:

- Using low-sulfur diesel fuel (15 parts per million sulfur maximum) in construction vehicles and equipment.

- Retrofitting engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
- Positioning the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed.
- Using catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
- Using enclosed, climate-controlled cabs pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Regularly maintaining diesel engines, which is essential to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance. For example, blue/black smoke indicates that an engine requires servicing or tuning.
- Reducing exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Purchasing new vehicles that are equipped with the most advanced emission control systems available.
- Using electric starting aids such as block heaters with older vehicles to warm the engine reduces diesel emissions.
- Using respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a NIOSH approval number. Never use paper masks or surgical masks without NIOSH approval numbers.

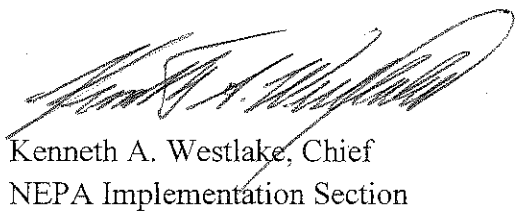
Reiterating our email sent to WisDOT on March 3, 2014, EPA concurs with FHWA's assessment of the information presented in the I-43 PM2.5 Conformity Hot Spot Analysis Project Summary Form that this project is not a "Project of Air Quality Concern" for transportation conformity purposes.

Editorial

EPA commends WisDOT and FHWA for incorporating recommendations made during correspondence on the preferred alternative, including highlighting the project elements within the text. Incorporation of these comments enhanced the readability of the document.

Thank you in advance for your consideration of our comments. We are committed to continue to work with FHWA and WisDOT on this project to reduce impacts to human health and the environment. We look forward to reviewing the Final EIS and ROD. Should you have any questions, please do not hesitate to contact me or Elizabeth Poole of my staff at (312) 353-2087 or poole.elizabeth@epa.gov.

Sincerely,



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Anthony Jernigan, US Army Corps of Engineers
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